

II. THE CLAIMS

1. (Previously presented) A method for the transmission of data between a camera module and an electronic device, said method comprising: generating image data in the image sensor of the camera module, said image sensor comprising at least one row of pixels, and said image data comprising the data generated by said row of pixels, and collecting statistical data from said image data, wherein said statistical data is suitable for processing an image to be generated; and wherein the method further comprises: transmitting said image data and said statistical data from the camera module to the electronic device essentially at the same time, and using said statistical data for adjusting said image sensor of the camera module for generating image data for a next image.

2. (Original) A method according to claim 1, wherein said image data and said statistical data are transmitted interlaced with each other on at least one common bus.

3. (Original) A method according to claim 2, wherein said image data and said statistical data are transmitted in the same data frame, said data frame comprising at least one image data unit, at least one statistical data unit, and at least one synchronization code to separate said image data unit from said statistical data unit.

4. (Original) A method according to claim 3, wherein said image data unit comprises image data generated by at least one said row of pixels and that said statistical data unit comprises statistical data for said image data generated by at least one row of pixels.

5. (Original) A method according to claim 4, wherein said row of pixels is a vertical or horizontal row in said image sensor.

6. (Original) A method according to claim 5, wherein said data frame is transmitted from the camera module to the electronic device in the form of a serial synchronized differential signal.

7. (Previously presented) A method according to claim 2, wherein the camera module and the electronic device are integrated into one single device and that said bus is a device-internal bus.

8. (Original) A method according to claim 7, wherein said transmitted statistical data is used as the generation basis for at least one parameter related to image processing.

9. (Original) A method according to claim 8, wherein said at least one image-processing parameter created is used for the processing of the image to be generated.

10. (Cancelled)

11. (Previously presented) A device comprising a camera module and an electronic device, comprising means for generating image data in the image sensor of the camera module, said image sensor comprising at least one row of pixels and said image data comprising the data generated by said rows of pixels, means for collecting statistical data from said image data, wherein said statistical data is suitable for processing an image to be generated; and wherein the device further comprises means for transmitting image data and statistical data from the camera module to the electronic

device essentially at the same time, and means for adjusting, on the basis of said statistical data, said image sensor of the camera module for generating image data for a next image.

12. (Original) A device according to claim 11, wherein said data transmission means are implemented for transmitting said image data and said statistical data in the same data frame, said data frame comprising at least one image data unit, at least one statistical data unit, and at least one synchronization code to separate said image data unit from said statistical data unit.

13. (Original) A device according to claim 12, wherein said data frame comprises said image data and said statistical data interlaced with each other and that said data frame is transmitted from the camera module to the electronic device on at least one bus.

14. (Original) A device according to claim 13, wherein said data transmission means are additionally implemented for transmitting said data frame from the camera module to the electronic device in the form of a serial synchronized differential signal.

15. (Previously presented) A device according to claim 11, wherein the device also comprises means for generating an image-processing parameter from the transmitted statistical data.

16. (Original) A device according to claim 15, wherein in addition, the device comprises means for image data processing to process the transmitted image data based on said image-processing parameter.

17. (Original) A device according to claim 16, wherein said means for image data processing have been implemented for processing the image to be generated.

18. (Cancelled)

19. (Previously presented) A device according to claim 11, wherein said device comprising said camera module and said electronic device is a mobile communications terminal.

20. (Currently amended) A device according to claim 19, wherein said ~~mobile communications terminal~~ electronic device and said camera module are integrated into one single device, ~~and that said bus is a~~ wherein transmission of said image data and said statistical data from the camera module to the electronic device is accomplished on at least one device-internal bus.

21. (Previously presented) A method according to claim 1, wherein said collecting of statistical data from said image data is performed in said camera module, said statistical data including image brightness.

22. (Previously presented) A device according to claim 11, wherein said means for collecting statistical data from said image data is located in said camera module, said statistical data including image brightness.

23. (New) A device comprising:

a camera module and an electronic device;

an image sensor within the camera module for generating image data, said image sensor comprising at least one row of pixels, and said image data comprising data generated by said at least one row of pixels;

a statistical data collector for collecting statistical data from said image data, wherein said statistical data is suitable for processing an image to be generated;

an interlacing device for transmitting image data and statistical data from the camera module to the electronic device essentially at the same time; and

a processor for adjusting said image sensor of the camera module, on the basis of said statistical data, for generating image data for a next image.

24. (New) A device according to claim 23, wherein said interlacing device is implemented for transmitting said image data and said statistical data in the same data frame, said data frame comprising at least one image data unit, at least one statistical data unit, and at least one synchronization code to separate said image data unit from said statistical data unit.

25. (New) A device according to claim 24, wherein said data frame comprises said image data and said statistical data interlaced with each other and that said data frame is transmitted from the camera module to the electronic device on at least one bus.

26. (New) A device according to claim 25, wherein said interlacing device is additionally implemented for transmitting said data frame from the camera module to the electronic device in the form of a serial synchronized differential signal.

27. (New) A device according to claim 23, further comprising a processor for generating an image-processing parameter from the transmitted statistical data.

28. (New) A device according to claim 27, further comprising an imaging processing unit to process the transmitted image data based on said image-processing parameter.

29. (New) A device according to claim 28, wherein said image processing unit is implemented for processing the image to be generated.

30. (New) A device according to claim 23, wherein said device comprising said camera module and said electronic device is a mobile communications terminal.

31. (New) A device according to claim 30, wherein said electronic device and said camera module are integrated into one single device, and wherein transmission of said image data and said statistical data from the camera module to the electronic device is accomplished on at least one device-internal bus.

32. (New) A device according to claim 23, wherein statistical data collector for collecting statistical data from said image data is located in said camera module, said statistical data including image brightness.